

No. 20038

IN THE

United States Court of Appeals

FOR THE NINTH CIRCUIT

RORY EVERETT PAGE, CHARLES L. HOPE, BEVERLY JO
PAGE, and BONEVA L. HOPE,

Appellants,

vs.

U.S. DIVERS CO., INC., a California corporation,

Appellee.

APPELLANTS' REPLY BRIEF.

*Appellants
Vol. 335*

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APPELLANTS' REPLY BRIEF.

I.

**Appellee Concedes That Page Both Recognized and
Solved the Safety Problem of the Aqua-Lung.**

The Page invention is a safety improvement in the Aqua-Lung, and more specifically, it relates to undesired water which is present within the breathing circuit of the equipment, and to minimizing the interference thereby created with the necessary breathing action of the diver (App. Op. Br. pp. 2, 8, 9, 13-15). The then existing safety problem and attendant danger of drowning were prominently mentioned in the original Page patent application filed on March 29, 1954 [Ex. 3, p. 1, line 18, to p. 2, line 13, incl.]

About the same day that the Page patent application was filed, Hope-Page Engineering Corporation published its first advertisement on the "Safety First Non-

Return Valve” [Ex. 12]. On the following day, March 30, 1954, Mr. Rene Bussoz, then president of U.S. Divers Corporation, wrote to Hope-Page Engineering Corporation as follows:

“We saw in the recent issue of ‘The Skin Diver’ magazine your advertisement on your new Safety First Non-Return Valve and became interested in this item”. [Ex. 35].

Appellee in its brief carefully avoids mentioning the word “safety”. Nevertheless, by its silence, it concedes that the safety problem as described in the Page patent did exist, and also that Page was the first to recognize that problem and was successful in solving it. Appellee’s position could hardly be otherwise in view of the uncontradicted testimony of the diving experts, Professor Tillman [Tr. pp. 27-47] and Bevly Morgan [Tr. pp. 125-159], and Finding of Fact No. 8 [R. pp. 92, 93].

Invention may consist of recognizing that a specific cause precludes the achievement of maximum usefulness of a prior art device, regardless of whether subsequent construction of the improved apparatus requires further use of the inventive faculty. *In re Pennington* (CCPA, 1957), 44 CCPA 789, 241 F. 2d 750, 754, 113 USPQ 81, 85. That rule appears to be controlling in this case, since after many years of wide usage of the Cousteau Aqua-Lung Page alone was able to recognize that the apparatus had a deficiency which perhaps could or should be remedied.

It is an undenied fact that thousands of divers today are using the apparatus manufactured and sold by appellee U.S. Divers, and in so using the apparatus are achieving the safety benefits originally conceived and provided by Page.

II.

Appellee Concedes the Novel Cooperative Functioning of the Page Apparatus.

Appellants in their opening brief (pp. 22-25) described the acts of invention involved in Page's pioneering work. Appellee in its brief (p. 21) simply replies "all of this is irrelevant".

Appellants in their opening brief (pp. 28-34) also summarized the novel cooperative functioning of the Page apparatus. Appellee in its brief (p. 21) simply replies: "It is irrelevant and has nothing to do with the merits of the case." And at the same time appellee accuses Page of "an elaborate pseudo-scientific explanation" of his invention. In this connection it is worthy of note that Page is presently employed as a project engineer in our Nation's space program [Tr. p. 273, line 12, to p. 274, line 18]. The Court can take judicial notice of the fact that in the design and manufacture of space apparatus the crucial requirement is safe, reliable operation; and in diving equipment used great distances underwater, where the safety of human life is also involved, the same crucial requirement exists. It is therefore quite clear that the action of appellee in characterizing Page's explanation as "pseudo-scientific" but without answering its merits amounts to a concession of its correctness.

Novel cooperative functioning of the Page apparatus compels a finding that the Page patent is valid. See cases cited in appellants' opening brief, page 35; and the earlier decision of this Court in *Coleman v. Holly* (C. A. 9, 1956), 233 F. 2d 71, 78-80; 109 USPQ 204, 209-211; certiorari denied 352 U.S. 952. And to the same effect is the decision just announced by the United States Supreme Court on February 21, 1966, in the case of *United States v. Adams*, 148 USPQ 479, 482-484.

The unsupported assertion of appellee that the novel cooperative functioning of the Page apparatus "is inherent in prior art breathing systems" (Appellee's Br. p. 21) is answered in the following paragraph.

III.

The Prior Art Patents Fail to Anticipate Either the Structure or the Function of the Page Apparatus.

The Page Aqua-Lung is a diving apparatus having a self-contained supply of compressed air, and including four operative valve mechanisms, namely: demand valve 19; non-return inlet valve 34-38; non-return exhaust valve 34'-38'; and flipper valve 28 [Page patent in suit, Ex. 17, Figs. 3 and 9; and see chart, appendix to App. Op. Br.]. The opening and closing actions of the various valve mechanisms in the Page Aqua-Lung take place in response to one or more of three separate and distinct energy sources. These energy sources include: (1) energy resulting from changes in ambient pressure during ascent or descent of the diver; (2) the lungs of the diver; (3) the stored energy of the compressed air supply.

It is therefore seen that in the Page apparatus, where there are four valve mechanisms and three energy sources, there exist twelve distinct possibilities as to whether a particular valve may be actuated by a particular source of energy. When the joint action of two or three of the energy sources is considered, the operation becomes even more complex. None of the prior art patents discloses a comparable apparatus.

Appellee now relies on ten prior patents, and the very fact of having to rely on so many references indicates the weakness of its position. Exhibits 42 and 43, set forth in appellants' opening brief, pages 16 and 17, are helpful in classifying these patents. The Monro, Young, Schwarz, and Rosling patents [Ex. 42] do

not even relate to diving apparatus, and were considered by the Patent Office and cited against the Page patent.

Of the six prior patents which do relate to diving apparatus [Ex. 43] all but the Hensley and Nohl patents had been considered by the Patent Office. These two references add nothing of significance to what is shown in the other eight, and appellee is therefore in the position of directly contradicting the Patent Office determination and the statutory presumption of validity which results therefrom. It is noted that the District Court in its first memorandum opinion [Tr. pp. 73, 74] had no difficulty in holding the Page patent valid over all of the prior art that had been considered by the Court; and in the second memorandum opinion [Tr. pp. 75-78] issued four months later, when the Court had apparently forgotten the evidence in the validity trial, the previous decision was reversed on the basis of the Hawkins patent.

The Hawkins patent was fully considered by the Patent Office, having been called to the attention of the Examiner by the applicant both during the original application proceeding [Ex. 3, p. 64, line 9] and during the reissue application proceeding [Ex. 26, pp. 151, 152]. The testimony showed that the Hawkins device is not even properly considered to be diving apparatus [Tr. p. 963, line 21, to p. 964, line 24]. Furthermore, water could not be successfully discharged from the Hawkins device, because the necessary vertical alignment of the device would cause water in the discharge tube above the discharge valve to run by force of gravity back through the discharge valve to the mouthpiece.

Each of the Lambertson and Nohl patents shows a diving apparatus of the rebreather, or closed circuit type. The rebreather necessarily includes two valves in its breathing circuit, for directionalizing the air flow;

and it will be noted that in the Aqua-Lung this same function is performed by the demand valve 19 and the flipper valve 28 [Ex. 17, Fig. 9]. The rebreather contains no compressed air supply, and the valve operations are actuated only by the lung power of the diver, in conjunction with energy resulting from changes in ambient pressure during ascent or descent. It is readily apparent that the two valve mechanisms and two energy sources of the rebreather are completely inadequate to suggest the complex mode of operation that is involved in the four valve mechanisms and three energy sources of the Page apparatus. Furthermore, the rebreather apparatus incorporates a chemical unit in the breathing circuit for generating oxygen, and the admission of any substantial quantity of water damages the chemical unit and destroys its effectiveness, with possibly the additional result of generating toxic gases; no provision is made for ejecting water because the admission of water into the breathing circuit in the first instance is a forbidden condition of operation. The rebreather is also limited in its usefulness to a depth of about 33 feet [Tr. pp. 203-206, 209, 210].

The Cousteau and Cupp patents relate to diving apparatus that contains its own supply of compressed air, and are admittedly relevant references. As discussed at length in appellants' opening brief, the Page apparatus differs from both Cousteau (pp. 4, 5, 14, 15, 23, 31, 32 and 40) and Cupp (pp. 14, 15, 40 and 41) in numerous respects, and these references utterly fail to teach or suggest the safety feature on which the Page invention is based.

As pointed out in appellants' opening brief, p. 22, the limitations of the Cousteau Aqua-Lung in respect to safety were considered unavoidable by the expert divers of the time, and Page was the first to recognize that modification of the apparatus might be a possible

alternative to training divers in the use of the apparatus as it then existed. Five years after Page conceived his invention the defendant (appellee) glowingly advertised the results of his work in its 1957 catalogue in the following words:

“Because of the ingenious combination of the two non-return valves, the mere action of breathing will clear the mouthpiece of any water accumulation”.

[Ex. 39; U.S. Divers 1957 “Aqua-Lung” catalogue, p. 4, right center]. Of course after the issuance of the Page patent in 1958 this advertisement was discontinued.

It is therefore submitted that Findings of Fact Nos. 7, 9, 10, 18-21, 23-28, and 36 [R. pp. 91-100] are contrary to the evidence.

IV.

The Check Valves Which Page Added to the Aqua-Lung Perform Novel and Unique Functions.

In addition to performing some functions which are old, the check valves which Page added to the Aqua-Lung also perform separate and distinct functions which are novel and unique.

One of the old functions of the check valves 34-38 and 34'-38' is to directionalize the flow of air within the breathing circuit, but their use for that purpose is superfluous because the air flow was already directionalized [Tr. p. 73, lines 28-32] by the demand valve 19 and flipper valve 28 [in Figure 1 of the Cousteau patent, Ex. B, the demand valve is identified as M and the flipper valve as I]. Furthermore, this duplication would appear undesirable because the dynamic pressure drop caused by the added valves would appear to add to the workload required of the diver's lungs.

Another old function of the check valves in the Page Aqua-Lung, resulting from their placement close to the mouthpiece, is to diminish the intermingling of fresh air with breathed air, and thereby improve the breathing efficiency of the apparatus. Placement of valves close to a mouthpiece for this purpose is taught by the prior art.

The vitally new function of the check valves 34-38 and 34'-38' is to limit the interference of undesired water with the breathable air supply of the diver, and thereby provide safety. The mode of operation is well described in the patent in suit, as quoted in appellants' opening brief at pages 28 to 30. The resulting new mode of operation of the apparatus has completely eliminated the former safety problem [Tr. p. 43, lines 11-21].

The non-return exhaust valve 34'-38' also performs the new function of discharging a mixture of water and air, in variable proportions, and regardless of whether the diver rolls over on his side or not. Page admitted in his testimony that he used a standard gas-mask type of valve in his apparatus. What the prior art fails to show, however, is the use of a gas-mask type valve for discharging water, either in variable proportions, or at all. In view of the fact that the density of sea water is 800 times as great as the density of air at atmospheric pressure [Tr. p. 1,009, lines 5-13], and that the gas-mask type valve has a unique capability for opening by different amounts at different portions of its periphery, this novel use of the gas-mask type valve is highly significant [Tr. p. 428, lines 1-18].

The inlet check valve 34-38 also performs another new function, as explained in appellants' opening brief commencing at the middle of page 32 to the bottom of page 34. This is the function of causing a large part of

the work of closing off the demand valve 19 to be performed by energy derived from the compressed air tank, rather than by energy furnished from the lungs of the diver. Briefly, when the diver is through inhaling and commences to exhale, the force of his exhaled breath causes the inlet check valve 34-38 to close off, thus isolating the diver's lungs from the demand valve 19; the mechanical work of closing off the demand valve 19 so as to conclude the inhale portion of the operating cycle is then done by energy derived from the compressed air tank, while at the very same time the diver is already commencing to exhale through the exhaust tube 26 and discharge valve 28.

V.

In the Page Apparatus the Old (Cousteau) Aqua-Lung Elements Function Differently Than Before.

With inexperienced divers “. . . the problem is always getting air and getting enough air” [Tr. p. 26, line 15, to p. 27, line 12]. In the Cousteau Aqua-Lung the inhale cycle had to be completed by closing off demand valve 19 before the exhale cycle could be initiated by opening flipper valve 28 (App. Op. Br. pp. 31, 32). But in the Page apparatus the diver can discharge the foul air through flipper valve 28 without waiting for the demand valve to close [Tr. pp. 929, 930]. And discharging the foul air does not take as long [Tr. p. 931, lines 23, 24]. Consequently he is ready for the next inhalation of fresh air just that much sooner. And the final closing action of demand valve 19 is accomplished solely by the compressed air with no aid from the diver's lungs.

This new and advantageous mode of operation of the old elements of the Aqua-Lung is an inherent part of the Page safety invention. As this Court has stated:

“All the uses or functions of an invention are covered and secured by a single patent for that invention, and this includes even those not known to the inventor at the time the patent is granted and must be considered in determining the validity of the patent”. *Talon, Inc. v. Union Slide Fastener, Inc.* (C. A. 9, 1959), 266 F. 2d 731, 734, 121 USPQ 249.

VI.

The Page Invention Provides New and Unexpected Results.

One new result which the Page invention provides, which could not have been anticipated by experts working in the field at that time, is that the Aqua-Lung diving equipment is made safe even for novice or amateur divers [Tr. p. 153, line 18, to p. 154, line 7].

Another unexpected result of the Page invention is that, with the addition of the check valves for safety purposes, the workload on the diver's lungs is not only held to tolerable limits but is actually decreased. This results from the fact that the diver no longer has to use his lung power in inflating the air inlet hose, and closing off the demand valve 19, but this work is instead performed by energy derived from the compressed air tank. Page did not originally anticipate this beneficent result [Tr. p. 928, lines 3-17], because of its dependence upon complicated factors of pressure, time, and operating energy. However, he did positively testify at the trial that this is the manner in which the apparatus works [Tr. p. 927, line 16, to p. 931, line 17]. The record contains no contradiction of that evidence.

Finding of Fact No. 29 [R. p. 98] is therefore contrary to the evidence.

VII.

All the Claims Are Valid.

Claims 7 to 18 are directed to a complete diving apparatus, including compressed air supply, pressure regulator, inlet and exhaust hoses, discharge or flipper valve, mouthpiece compartment with mouthpiece, and check valves supported at the ends of the mouthpiece compartment. It is of course the check valves which differentiate the combination here claimed from that of Cousteau.

Claims 7, 9, 10 and 15 are specifically limited to the gas-mask type of valve (shown in Figures 3 to 6, inclusive of the patent) which has a resilient valve member supported at the center of the valve body, so that the various peripheral portions of the valve member can move independently of each other.

Claims 8 to 10 do not expressly recite the compressed air tank and pressure regulator, but incorporate them by reference, in the manner and for the reasons set forth in appellants' opening brief (pp. 9, 10, and 43-45) relative to Claim 9.

Particular attention is directed to Claim 9, which is one of the claims infringed by appellee. Claim 9 was contained in the Page application as originally filed on March 29, 1954, but was then numbered as claim 10. Claim 9 is directed to the underwater discharge of water from the mouthpiece compartment, which as taught by the Page patent is the essence of the Page safety invention. Claim 9 expressly recites the ejection of water from the mouthpiece compartment through the non-return exhaust valve ("Second valve") into the air discharge tube, and it also expressly refers to a mixture of air and water flowing from the compartment into the air discharge tube. While the function of the non-return inlet valve ("first valve") in excluding

water from the inlet hose is not expressly stated, it may be fairly implied from the recitation "said second valve so disposed as to permit ejection of all water entering said tubular body therethrough into an air discharge tube". [Ex. 17, col. 12, lines 22-50]. In other words, the statement in the claim that *all of the water which enters* the tubular body is ejected through the second valve clearly implies that none of that water is permitted to flow through the first valve into the air inlet hose.

Appellee in its brief seems to say that interpreting Claim 9 as reciting the compressed air supply, regulator, and other necessary functioning parts of the Aqua-Lung, is either illegal or improper. In this connection it is most interesting to compare Claim 9 with appellee's 1957 advertisement [Ex. 39, p. 4] which refers to "The Ingenious Combination of the Two Non-Return Valves". But how, one asks, could that combination be ingenious in view of the many prior art patents cited in appellee's brief, pages 18 and 19? The answer is simple. Appellee's advertisement incorporated by reference the old parts of the Aqua-Lung, and attributed ingenuity to the addition of the two non-return valves thereto. And that is exactly what Claim 9 does. Claim 9, of course, was written three years prior to appellee's advertisement.

This narrowed interpretation of Claim 9 was chosen both by Page and by the Patent Office, not only because the language of the claim compels that interpretation, but also because such interpretation of the claim precludes any possible doubt as to its validity. In any event, to thus interpret Claim 9 in the light of the disclosure and of the stated objects of the invention is clearly compelled by the recent Supreme Court decision in the *Adams* case, *supra*, where the Court states:

"It is true that Claims 1 and 10, *supra*, do not mention a water electrolyte, but . . . it is funda-

mental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention . . .". *United States v. Adams*, Supreme Court of the United States, 148 USPQ 479 at page 482.

Reissue Claim 15 is narrower in scope in every respect than original Claim 9. Claim 15 positively recites every element of Claim 9, including the compressed air supply and pressure regulator which are incorporated in Claim 9 by reference; and it also defines the structural elements, their interconnections, and their cooperative relationships or functions, in greater detail and with greater clarity than does Claim 9.

Claims 1 to 6 are subcombination claims directed to "underwater breathing apparatus" including a mouth-piece-valve assembly. Claim 5, in particular, claims a new combination of apparatus consisting of a mouth-piece-valve assembly in which gas-mask type valves are used, and which is adapted to be removably coupled to the air hoses in an Aqua-Lung. At least two prior patents would have to be combined to provide the structure of Claim 5, including at least one patent that does not relate to diving apparatus at all. It is submitted that, in view of the new, useful, and unexpected results of the Page invention, to apply hindsight to anticipate the claim in this manner would be unjustified.

Claims 1 to 4 and 6 contain additional limitations which narrow their scope in various respects relative to the scope of Claim 5.

It is therefore submitted that Findings of Fact Nos. 12, 30 and 31 [R. pp. 94, 99] are contrary to the evidence.

VIII.

Appellee Has Deliberately Mis-Labeled the Narrowed Interpretation of Claim 9 as Being Broader.

It is axiomatic in the patent law that every additional limitation recited in a patent claim narrows its legal scope, while the omission of an element broadens the scope of the claim. *In re Reissue Application Papers Executed by Assignee* (Comr. Pat., 1963), 138 USPQ 80. In that case the Commissioner of Patents stated:

“For the purpose here involved a claim of a reissue application is broader than a corresponding patent claim if it omits any limitation included by such patent claim or in other words, if it would be infringed by any conceivable structure which does not infringe the patent claim, *In re Bostwick*, 26 CCPA 1117, 102 F. 2d 886, 41 USPQ 279; *Fox Typewriter Co. v. Corona Typewriter Co.* 282 F. 502, *Schenk et al v. United Aircraft Corporation*, 51 USPQ 519.”

Nevertheless, in deliberate disregard of this fundamental fact of the patent law, the appellee in its brief (p. 27) contends that the incorporation by reference of certain elements in the preamble of Claim 9 has the effect of broadening the scope of that claim. This assertion by the appellee is obviously a bald effort to confuse and conceal the true issues in this case.

IX.

The Purely Technical Defenses Raised to Reissue Claims 11 to 18 Are Not Applicable to the Facts of This Case.

The reissue patent contains the same drawings and the same technical description of the apparatus as were contained in the original patent [Exs. 4, 17]. The only changes accomplished in the reissue were that the

description of the theory of operation of the invention was clarified and enlarged, and claims 11 to 18 were added. All of the added claims 11 to 18 are directed to the same invention as covered by the original patent, namely, the safety improvement of the Aqua-Lung accomplished by the addition of a pair of check valves to the ends of the mouthpiece compartment. More specifically, as pointed in appellants' opening brief, page 37, the reissue Claims 11 to 18 are for the same invention as Claim 9.

The Cousteau patent No. 2,485,039 [Ex. B] was issued in the United States in 1949, and was therefore available to the public. However, in early 1954 neither Page nor his patent attorney was familiar with the Cousteau patent, and the attorney labored through a detailed description of the internal mechanism of the pressure regulator which would have been unnecessary had he known of the Cousteau patent and been able to refer to it by its patent number. This added task detracted from the explanation of the Page invention.

What the reissue claims do is make "clearer and more obvious" how the same apparatus accomplishes the same results in the same manner as set forth in the original patent. This is exactly the purpose of a reissue patent, as is stated in *Minnesota Mining and Mfg. Co. v. Technical Tape Corp.* (CCA 7, 1962), 309 F. 2d 55 at 58, 135 USPQ 176 at 179.

It is evident from the record that appellants' present reliance upon a safety improvement in the Aqua-Lung as constituting the patentable invention "was not the after-thought of an astute patent trial lawyer." (*United States v. Adams*, 148 USPQ 479, 482). The original patent application clearly set forth the safety of the Aqua-Lung as the primary object of the invention; and much of the revision in the reissue patent consisted simply of replacement of the trademark "Aqua-Lung"

with a formal definition of the equipment. The various advertisements published by Hope-Page Engineering Corporation in 1954 were vocal in their elucidation of safety for the Aqua-Lung, often including the phrase "safety with every breath" [Exs. 12, 27, 28, 29, 16, 30 and 31]. The argument that the preambles of the present claims 8, 9 and 10 (then set forth in the claim then numbered as 8) incorporated the old elements of the Aqua-Lung was first advanced to the Patent Office in October, 1955 [Ex. 3, pp. 37-42]. This was months after Bussoz, then president of U.S. Divers, had told Page that his company was changing the design of its equipment and would no longer use non-return valves associated with the mouthpiece [Tr. p. 375, lines 2-17]. It was also months before U.S. Divers came on the market with its Kleer E-Z which of course *does* contain the non-return valves.

Appellee's technical objections to the reissue are largely disposed of by the established law as reflected in the recent decision in *McCullough Tool Company et al. v. Well Surveys, Inc., et al.* (C. A. 10, 1965), 343 F. 2d 381, 145 USPQ 6. One of the patents involved in that case was the Bender Reissue Patent No. Re. 23,226. It was there contended that the reissue claims were not for the same invention as the original patent; however, the Court found that the drawings had remained unchanged, and that the subject matter of the reissue claims was explicitly disclosed and taught but was not claimed in the original patent, and that the reissue claims covered the same invention as disclosed by the original patent. 343 F. 2d pages 388-390.

It was also contended in the *McCullough* case that, due to cancellation of claims 7 and 8 of the original patent application, the statutory requirement of inadvertence, accident or mistake for the reissue patent could not be found to exist. The Court found that the cancelled claims 7 and 8 were "broad enough to include the basic concept of the reissue claims" (343 F. 2d p. 389); but at the same time held that the decision of the Commissioner of Patents upon the question of inadvertence, accident, or mistake, was binding under the rule laid down in *Topliff v. Topliff*, 145 U.S. 156, 171, 12 S. Ct. 825, 831, 36 L. Ed. 658.

Appellee in its brief has attempted to make much of the cancellation of claims 17, 18, and 22 of the original Page patent application. However, it clearly appears from the record [Ex. 3, pp. 67-86] and from the testimony of Mr. Hall [Tr. pp. 974-977] that all three of these claims were broader in scope than the claims subsequently added in the reissue proceeding; that claim 17 (together with claim 18 dependent thereon) was defective in failing to recite any connection by which the pressure-sensitive valves were supported; and that claim 22 had been refused entry by the Examiner and was never considered by him. It therefore appears that the record provides ample basis for the Commissioner's finding of inadvertence, accident or mistake.

Appellee has placed reliance on the prior decisions of this Court in *Riley v. Broadway Hale Stores, Inc.* (1954), 217 F. 2d 530, and *Lockwood v. Langendorf United Bakeries, Inc.* (1963), 324 F. 2d 82. Both of those cases are easily distinguished, however, on the

basis that the applicant sought to cover a different invention in the reissue from that which had been disclosed in the original patent. Such is not the case here, but rather, the subject matter of claims 7 to 10 of the original patent has simply been restated in clearer and better language.

Furthermore, Claims 11-16 are all narrower than any of the claims of the original patent by virtue of the inclusion of the last phrase of Claim 11 which reads:

“said first and second valves and said hollow body together defining a compartment whose volume is relatively small compared to the combined volume of said air supply and air discharge tubes”.

[Ex. 17, Col. 13, lines 46-49]. The materiality of that limitation is explained in the patent [Ex. 17, Col. 9, lines 16-42] and was substantiated by the testimony [Tr. p. 43, lines 4-21; Tr. p. 142, line 13, to p. 143, line 4; Tr. p. 146, lines 16-23; Tr. p. 147, line 22, to p. 148, line 25; Tr. p. 426, line 17, to p. 427, line 16].

Appellee also attempts to rely upon the case of *Muncie Gear Works Inc. v. Outboard, Marine and Mfg. Co.* (1942), 315 U.S. 759. That case is easily distinguished, however, in that the later presented claims covered a different invention than was covered in the original claims. That distinction was recognized in the case of *Hartzell v. McCauley* (CCA 6, 1962), 304 F. 2d 481 at page 484, 134 USPQ 275 at page 278.

Appellee also asserts that new matter has been introduced into the reissue patent in violation of the statute. But at the very same time appellee states, quite correctly, that a scientific explanation cannot be patented (Appellee's Br. p. 22). And it is also well settled law that the mere addition of a theory of operation to a patent application does not constitute new matter in violation of the statute. *Kansas City Southern Ry. Co.*

v. Silica Products Co., 48 F. 2d 503, 506 (CCA 8, 1931), cert. den. 284 U.S. 626, 76 L.Ed. 533 (1931).

The present case involves merely the revision and expansion of a description of theory of operation. Accordingly, the reissue patent was legally obtained.

X.

Validity Is the Primary Issue on This Appeal.

The action of the District Court in reversing its original ruling holding the patent valid, without the introduction of new or different evidence bearing on that question, demands a thorough review by this Court. This Court may hold as a matter of law that the patent is both valid and infringed. *National Sponge v. Rubber Corp.* (CCA 9, 1961), 286 F. 2d 731, 128 USPQ 320 and *Hoeltke v. Kemp*, 80 F. 2d 912, 26 USPQ 114.

The record of this case is replete with evidence and admissions which establish that the apparatus of defendant (appellee) is substantially the same as the apparatus of the Page patented invention and accomplishes the same result in the same manner.

Accordingly, the judgment of the District Court should be reversed, and the patent should be held to be valid and infringed.

Respectfully submitted,

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Certificate.

I certify that, in connection with the preparation of this brief, I have examined Rules 18 and 19 of the United States Court of Appeals for the Ninth Circuit, and that, in my opinion, the foregoing brief is in full compliance with those rules.

GENE W. ARANT

